



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/747,698	12/22/2000	Clive C. Hayball	584-1038	9931
7590	03/23/2005		EXAMINER	
Lee, Mann, Smith, McWilliams, Sweeney & Ohlson P.O. Box 2786 Chicago, IL 60690-2786			HALIM, SAHERA	
			ART UNIT	PAPER NUMBER
			2157	

DATE MAILED: 03/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/747,698	HAYBALL, CLIVE C.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Sahera Halim	2157	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 12/16/2004.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-6,8,12 and 13 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-6,8,12 and 13 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|  | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

1. This action is responsive to restriction/election received on Dec. 16, 2004. Claims 1-6, 8, 12 and 13 were elected without traverse. Claims 7, 9-11 and 14 were canceled. Claims 1-6, 8, 12 and 13 are pending examination.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-6, 8, 12 and 13 are rejected under 35 U.S.C. 102(e) as being anticipated by Rochberger et al., U.S. Patent No. 6,205,146 (referred to hereafter as Rochberger).

Rochberger teaches the invention explicitly as claimed including a system and method of generating routing tables depending on the source and the destination addresses (see abstract).

As to claim 1, a method of indexing content in an IP-based network comprising:

(a) intercepting traffic flowing in the network (see col. 5 lines 51-57, packets are intercepted on the network),  
(b) extracting content Identity information and associated destination location

information from the traffic flow (see col. 5 lines 51-57, a destination address is determined),

(c) generating a mapping from a content item identified by the extracted identity information to at least one destination location identified by the associated', destination location information (see col. 5 lines 58-col. 6 lines 6, the number of hops and the cost is determined for each destination, a table is generated with the hop addresses), and

(d) storing the mapping in a content index database which is operable to provide, an instance mapping containing list of destination. locations in response to an instance request containing a content identity (see col. 5 lines 58-col. 6 lines 6, the route tables are stored on the nodes).

As to claim 2, a method according to claim 1, wherein the step of intercepting traffic is carried out by Intercepting traffic flowing into a cache, and wherein the method, further comprises advertising the content identities for which mappings are, stored in the content index by sending advertising messages to a predetermined location (see col. 5 lines 58-col. 6 lines 6).

As to claim 3, a method according to claim 2, wherein the method further comprises recording the time of traffic flows into the cache which are related to a particular content and calculating the time period between a first flow of the content item into the cache and a subsequent flow of the content item into the cache thereby to assess how long items are held in the cache before they are expired and deleting the mapping relating to that content item when that content item is judged to have expired in the cache (see col. 5 lines 58-col. 6 lines 6, the data is deleted when the timer expires).

As to claim 4, a method according to claim 1, wherein the step of intercepting traffic is carried out by intercepting traffic flowing out of an original content source (see col. 5 lines 58-col. 6 lines 6).

As to claim 5, a method according to claim 4,; wherein the method further comprises receiving an advertising message which advertises a mapping; generated elsewhere on the network and which is related to content items stored in the original content source, and augmenting the content index using information contained iii the advertising message (see col. 5 lines 15-57).

As to claims 8, 12 and 13, a proxy for an IP-based network comprising:-

- (a) a data input operable to receive data from the network (see col. 5 lines 15-57),
- (b) a data output operable to send data to the network (see col. 5 lines 15-57),
- (c) an identity extractor operable to analysis data received at the data input and to extract content identity information from the data (see col. 5 lines 15-57),
- (d) a location extractor operable to analyze data received at the data input and to extract location information from the data (see col. 5 lines 58-col. 6 lines 15),
- (e) a mapping generator operable to generate a mapping from a content , identified by identity information provided by the identity one destination location Identified by associated destination location Information provided by the location extractor (see col. 5 lines 58-col. 6 lines 15), and
- (f) a content index database operable to store a mapping provided by the mapping generator and which is operable to provide an instance mapping, containing a

list of destination locations in response to an instance request containing a content identity (see col. 5 lines 58-col. 6 lines 15).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sahera Halim whose telephone number is (703) 305-8054. The examiner can normally be reached on M-F from 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571) 272-4001. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sahera Halim  
Patent Examiner  
AU: 2157

March 21, 2005



MOUSTAFA M. MEKY  
PRIMARY EXAMINER